

Renewable Energy in California Agriculture

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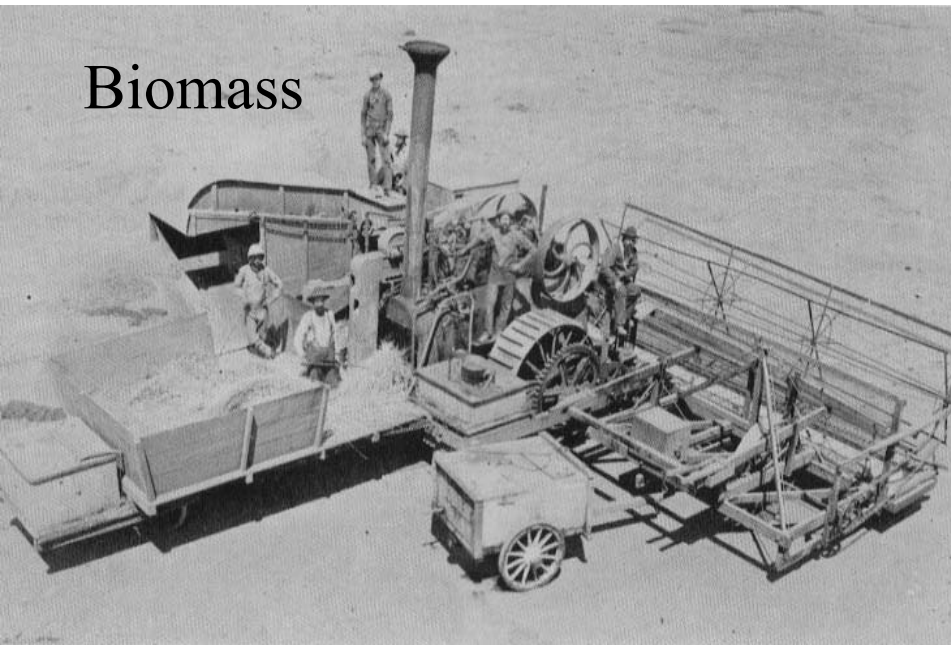
Agriculture has a history of using renewable energy



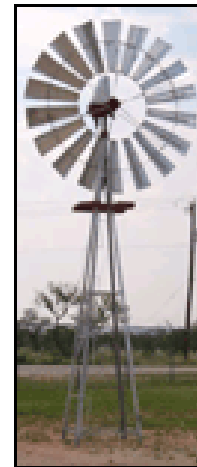
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Solar



Biomass

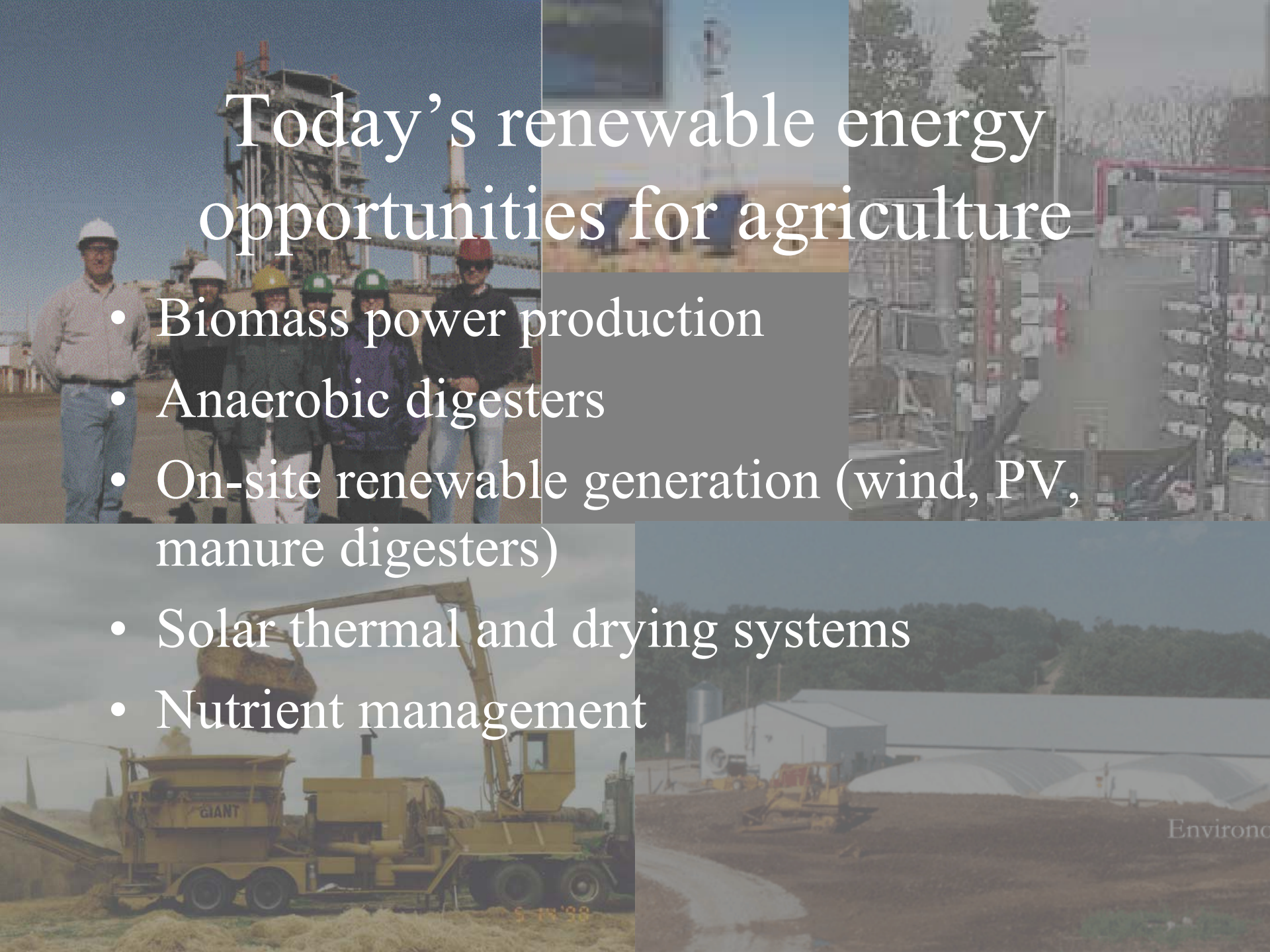


Wind



Today's renewable energy opportunities for agriculture

- Biomass power production
- Anaerobic digesters
- On-site renewable generation (wind, PV, manure digesters)
- Solar thermal and drying systems
- Nutrient management



Benefits of renewables in agriculture

- Stabilization/disposal of waste material (crop residues, manure)
- Possible energy cost reduction
- Possible reduction in pollutant emissions
- Possible reduction in GHG emissions
- Rural economic development

Key challenges to renewables in agriculture

- Cost of energy
- Capital cost of systems
- Interconnection for distributed generation
- System reliability and maintenance
- Regional regulatory requirements

Renewable energy policy priorities for agriculture

- Long term markets for agricultural biomass
- Incentives for renewable usage
- Fair interconnection and rate policies
- Remove other regulatory barriers
- System reliability testing
- New technology development



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